



ABSTRACT

A synchronizer provided on a personal computer. The synchronizer comprises computer code for comparing at least one file on the personal computer and a record of the file on the computer, and providing binary differencing data between the file and the record of the file, and a transaction generator providing at least one binary difference transaction including said binary differencing data to an output. The computer code may be alternatively provided in an article of manufacture, comprising a nonvolatile storage apparatus or an installation package transmittable over a network connection. The binary difference transaction includes a binary difference comparison between a first file and a previous version of said first file, and a network coupling routine.